

Common Digital TV Standard Urged for Western Hemisphere

U.S. Industry Hopes to Benefit

By Linda Gossack Astor

Office of Telecommunications Technologies, Trade Development

On October 24, 2003, the Inter-American Telecommunications Commission (CITEL), which is part of the Organization of American States, adopted a resolution to move ahead in implementing terrestrial digital television (DTV) broadcasting using a common transmission standard throughout the Western Hemisphere. This is a major step toward creating the first hemispheric DTV marketplace.

A hemispheric DTV standard will facilitate the emergence of a huge market of 830 million people for U.S. companies, virtually tripling the current U.S. DTV market. The associated economies of scale will not only stimulate production of equipment from current and new suppliers at lower prices, but also encourage further cooperation and investment in research and development and hasten the delivery of innovative, high-value services throughout the region.

NEW BROADCAST STANDARDS

The Advanced Television Systems Committee (ATSC) is an international, non-profit organization that develops voluntary standards for digital television. The ATSC Forum is an affiliated organization that has assumed responsibility for education and advocacy activities conducted on behalf of the ATSC. The ATSC Forum estimates that hemispheric adoption of the ATSC standard for digital television, which is used in the United States, will result in nearly \$8 billion in U.S. exports: \$800 million in exports of broadcast transmission equipment, \$6 billion in exports of components for digital television consumer products, and \$1 billion in programming and other content exports within the first

10 years following adoption. Although the CITEL decision sets the stage for introducing this new technology in the entire region, it is non-binding. The ATSC Forum must now focus its efforts on responding to the interest in DTV expressed by governments and broadcasting companies throughout the Americas, which are beginning to plan transitions to digital broadcasting. The ATSC Forum is continuing to work through CITEL to assist countries in the Americas in implementing DTV broadcasting using ATSC standards by developing a step-by-step guidebook, and will host a DTV seminar at a CITEL meeting later this year. This is an example of one of the many activities included in the ATSC's work plan, considered vital since many countries in the region look to CITEL for direction on policy issues.

The ATSC Forum educates broadcasters, manufacturers, and policy-makers throughout the world about the benefits of digital television technology, and it advocates adoption of ATSC standards in order to achieve these benefits. The ATSC consists of approximately 140 entities ranging from small firms to large companies, most of which are either U.S. corporations, such as Motorola, Harris, Dolby Laboratories, Microsoft, Sun Microsystems, and Broadcom, or U.S. subsidiaries of foreign

companies, such as Zenith, Phillips, Sony, and Panasonic, which employ thousands of Americans. The ATSC Forum seeks to identify and educate smaller companies that could benefit from the adoption of a hemispheric standard, and inform them about opportunities to participate in the forum's events.

The ATSC Forum recently received a partnership grant from the U.S. Department of Commerce through the Market Development Cooperator Program (see sidebar). The goal of the grant is to promote the adoption of the ATSC standard for digital television throughout the Western Hemisphere. The ATSC Forum will partner with the International Trade Administration to achieve this and other goals. The forum's three-year MDCP agreement includes an aggressive program of adoption of the standard as well as post-adoption implementation efforts that incorporate a series of policy missions, technical seminars, and DTV exhibitions.

WHERE TO BEGIN

Brazil is the fourth-largest television market in the world. Brazil has already tested various DTV standards and is carefully weighing technical issues as well as the economic and social implications in its choice of a standard. Brazil's decision, anticipated in 2004, is expected to have a significant impact on the decisions of other countries in the region. As a result, Brazil has been and continues to be a major focus of the ATSC Forum's efforts. Other countries of emphasis include Mexico,

Chile, and Argentina. While Chile is supportive of the ATSC standard, DTV is not currently a high priority. Argentina adopted the ATSC standard in 1998, but its weak economic conditions have delayed implementation. Mexico is expected to announce its DTV policy and transition plan soon, including specification of the ATSC standard. Latin American countries vary in progress in planning for the transition to DTV. Commercial DTV services based on the ATSC standard are also deployed extensively in Canada and South Korea. The International Trade Administration is supporting the ATSC Forum's advocacy trips to Latin America both through the Commercial Service offices in each country, as well as ensuring that senior officials traveling to the region are made aware of the importance of a common DTV standard.

Although the International Trade Administration typically advocates for "technological neutrality" in foreign countries, broadcasting is considered to be unique because of its method of delivery. The ATSC standard—which is the DTV standard in the United States—was developed through an open standards-setting process under the auspices of the Federal Communications Commission, and was adopted by the FCC for digital terrestrial broadcasting in the United States in 1996. DTV broadcasting using the ATSC standard began in 1998 in the United States, and more than 1,200 DTV stations are now on the air. Competing, alternative standards have been developed in Europe (DVB), Japan (ISDB), and China, which are based on technology pioneered in the United States. None of the competing standards are compatible with the U.S. standard. Effective advocacy is therefore critical to achieving the desired benefits, as European governments and the Japanese government are actively interceding on behalf of their respective competing standards throughout Latin America. While the transition to terrestrial DTV broadcasting is steadily advancing in the United States, adoption of a DTV standard throughout the Americas is essential to preserve U.S. leadership in DTV technology.

The ATSC DTV standard supports high definition (HDTV) as well as other video formats. Because DTV provides a

huge data pipeline (almost 20 million bits per second) into the home, it can support a broad range of applications and services that benefit consumers. For example, while broadcasting HDTV signals, digital broadcasters can simultaneously deliver enhanced services, such as closed captioning and other services for the disabled, emergency information, and blocking codes to allow parents greater control over the Internet content. Thus, in addition to dramatically improving the technical quality of television, the ATSC standard also represents a fundamental advance in the information infrastructure of the nations that implement it.

In addition, the ATSC Forum makes a strong case for the technical advantages of the ATSC standard for the delivery of DTV services to the Americas. Most notably, the ATSC standard offers significantly better signal coverage capability compared with competing standards (which require more than twice as much transmitted power to achieve the same coverage), and it is less prone to interference. Europe and Asia employ wider bandwidth television channels than in Latin America, so DTV equipment built to the competing standards could not be utilized in Latin America without substantial, and costly, modifications. Moreover, work already done in the United States will provide the countries of Latin America with assistance and a head start in frequency planning for DTV.

In addition to helping small and large ATSC members export, the adoption of a hemispheric standard will help to realize the Bush administration's goals for regional integration and growth. A regional DTV standard offers the countries of the Western Hemisphere the opportunity to "bridge the digital divide" by expanding availability of the Internet and information services to consumers who otherwise would not have access to personal computers. To continue the momentum resulting from the CITEL resolution, the ATSC Forum conducted a demonstration at the private sector forum at the January 2004 Special Summit of the Americas held in Monterrey, Mexico. The demonstration showed how DTV broadcasting makes a variety of useful information services available to all socioeconomic groups within the Americas. ■

Market Development Cooperator Program

The Market Development Cooperator Program is a competitive, matching grants program administered by the International Trade Administration that builds public-private partnerships. Through the program, monetary assistance and personnel support is provided to state economic development agencies, trade associations, chambers of commerce, world trade centers, and other non-profit entities that are particularly effective in reaching small and medium-sized enterprises.

MDCP awards help to underwrite the start-up costs of innovative, export marketing ventures. An applicant must match each dollar of federal funding requested on a two-to-one basis. The individual awards cannot exceed \$400,000. Funds may be used over the period of time required to complete a project, but the period cannot exceed three years. Working together, the private and public sectors bring their particular assets to bear to develop a comprehensive, strategic plan to win or retain market share in a particular market or selected markets. The MDCP has generated more than \$2 billion in exports since its inception in the fall of 1992. In 2003, 54 organizations submitted applications, and seven organizations won MDCP awards. Applications for the 2004 awards will be available via www.export.gov/mdcp.

NEWS FROM
COMMERCE